

# Hiking Journal

## *Mauna Loa – Observatory Trail*

*December 19 & 20, 2006*

*By Joseph Lang*

The thought of climbing the world's largest active volcano had intrigued me for some time. I have climbed many of the higher peaks in the Sierra Nevada and southern Cascade ranges in California. So I decided to combine climbing Mauna Loa with a holiday getaway I had planned with several friends of mine also from Northern California.

Mauna Loa is a shield volcano on the main Hawaiian island of Hawai'i. According to Wikipedia "it is Earth's largest mountain, with a volume estimated at approximately 18,000 cubic miles (75,000 km<sup>3</sup>)." In Hawaiian, *mauna loa* means "long mountain". It is difficult to gain a scale of really how large this mountain is from any point on the island as it rises up so gradually from sea level.

The heights of mountains are generally given by their elevation above a datum, such as sea level. The highest point on Mauna Loa is 13,680 ft (4,170 m) above sea level. But the flanks of Mauna Loa continue another 16,400 ft (5,000 m) below sea level to the sea floor. The massive central portion of the volcano has depressed the sea floor another 26,000 ft (8,000 m) in the shape of an inverted cone, reflecting the profile of the volcano above it. Thus, the total relief of Mauna Loa, from its true base to its summit, is about 56,000 ft (17,170 m). This data was compiled by the USGS's Hawaiian Volcano Observatory.

Before climbing Mauna Loa we checked the weather forecast in detail at the Mauna Loa Weather Observatory, <http://www.mlo.noaa.gov/LiveData/FdataSAT.htm>. They have available current weather conditions including wind, temperature and projected precipitation (including rain and snow). Weather conditions can change quickly at the upper elevations on Mauna Loa so be sure to bring the proper gear for the worst possible weather. As my friend Dave Luiz and I planned to climb in December at nearly the shortest day of the year, we brought enough gear to cover winter conditions. We each brought fleece, down, gloves, rain gear, a hat, sunglasses, sunscreen, food, stove, tent and even a roll of duck tape in case the sharp volcanic rock damaged our hiking books. Be sure to check with the rangers at the Kilauea Visitor Center for a complete list of what to bring before departing on a climb of Mauna Loa.

We left Kailua-Kona at 4:30 AM on Tuesday morning and driving the Saddle and Mauna Loa Observatory (MLO) roads we arrived at the Mauna Loa Weather Observatory trailhead at 7:15 AM. Having just gone from sea level to 11,150 feet above sea level, we knew we were not acclimated for the climb so we walked around the Mauna Loa Weather Observatory building and used their lovely restroom facilities before departing out on the trail at 7:50 AM for the Mauna Loa Cabin with our 40-45 pound packs.

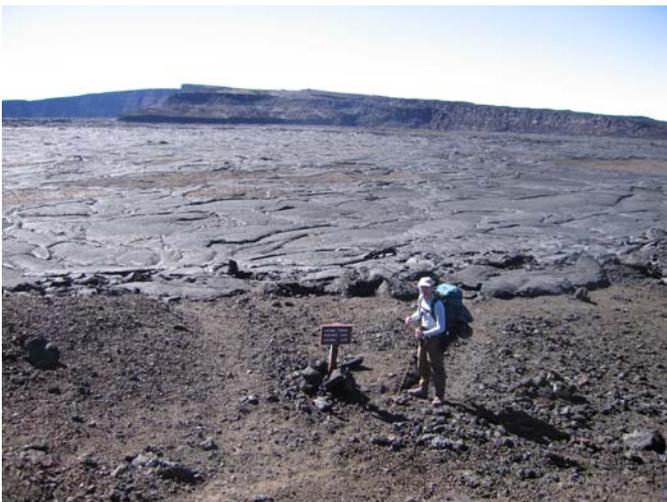
The trail begins where the MLO road ends on a 4-wheel drive road made of loose lava rock. It is like walking on a scree field. We followed this road for about a half mile, where you pick up the Observatory Trail on your left. The turnoff is well marked with a sign. The trail itself is just a series of cairns (*ahu*), one after the other. It is recommended that don't lose sight of the *ahu* behind you until you find the one ahead of you as it is easy to become disoriented on the broad face of the mountain. After a mile or so we reached a large broken lava tube marked by two large *ahu* which some enterprising hikers had built a lava rock wall around creating a nice shelter. The trail then continues over mixed 'a'ā and pāhoehoe lava fields.



'a'ā lava formation

Continuing up the mountain the trail crosses the same 4-wheel drive road again after a short distance then again meets up with the road once again but this time the trail makes a sharp right and follows the road until it reaches a locked gate. The trail then cuts to the right off the road and there is a sign that you are entering Hawai'i Volcanoes National Park. For about a half mile the trail is on well defined loose volcanic cinder, some on it spectacularly colored although the trail seems to get steeper in this section. There is

one more crossing of the road and then we crossed a less steep section of smooth pāhoehoe lava right up to the trail junction of the Mauna Loa, Summit, and Mauna Loa Cabin Trails. There is a well marked good pit toilet a hundred or so yards before this large trail junction which precariously straddles a rift in the lava.



North Pit - Trail junction

Just about 25 feet north of the trail junction with the Summit Trail is a nice recessed sheltered pit which is out of the wind and offers a slight bit of shade after hours in the sun. Dave and I stopped for lunch here around noon for around a 40-minute break. It was here that Dave began to feel nauseous and I began to get a minor headache from not properly acclimating to the altitude.

After lunch we changed to the Mauna Loa Cabin Trail which

dropped down slightly into the North Pit. This was likely the smoothest and most level part of the hike over pāhoehoe lava deposited in the last eruptive cycle of the volcano in 1984. It was on this section that my hiking partner began to show symptoms of moderate Acute Mountain Sickness (AMS). He vomited and had a moderate headache. I also still had a moderate headache but without nausea. After questioning him we decided to continue the several hundred feet up the mountain to the Mauna Loa Cabin while I constantly monitored his behavior to make sure more serious symptoms did not develop.

After walking off the North Pit, the trail narrowly bypasses the Lua Poholo Crater, which has a large tilted block of the old crater wall sticking out from the crater floor at a 45% angle. The Wilkes Expedition of 1840 showed this crater near the summit, but during recent eruptions, lava has flowed over the north side of the crater creating fascinating 'frozen' lava falls.



Mokuaweoweo caldera - Viewed from Summit Cabin

After passing the Lua Poholo Crater, the trail is a slow but steady uphill battle over rough 'a'ā lava. Most hiking journals mention that one can expect to travel at roughly 1 mile per hour on the Observatory and Mauna Loa Cabin Trails even for the fittest hikers. This is very accurate although once Dave and I began to show some signs of AMS, our travel speed slowed to around  $\frac{3}{4}$  miles per hour. The last mile of the Mauna Loa Cabin Trail seemed to take forever. We finally arrived

at the cabin around 4:00 PM. Dave was sick once more and I proceeded to cook dinner while Dave took a nap. Dave was only able to get down some Trader Joe's miso soup while I consumed a tasty dinner of Annie's macaroni and cheese. Dave immediately went back to bed while I went to the edge of the Mokuaweoweo caldera which is only stone's throw from the cabin. Someone had built a small wall comprised of lava rocks as a nice wind break when one can sit behind it and view the steaming vents inside the caldera at sunset and sunrise. The star gazing from this vantage point is awe inspiring. During the middle of the night I awoke for a call to nature and upon reentering the cabin found myself so light headed from the altitude that I fell to the floor with a loud thump. After elevating my feet to get the blood back to my head, I sat there with my headlamp lighting up the ceiling for about 5-10 minutes before heading back to bed. A pounding headache, a symptom of AMS, stayed with me for the remainder of the night.



Mokuaweoweo caldera - Viewed from Summit

After a restless night's sleep we both awoke and after breakfast we felt much better, packed our gear and headed back down the trail to the junction of the Summit Trail. With nausea and headaches behind us, we then left our packs at the trail junction and headed up the 2.6 mile long Summit Trail to the true summit of Mauna Loa. The views across the 2 mile wide caldera are amazing. From the summit, Maui's 10,023 ft (3,055 m) Haleakala is clearly visible as are the distant mountains on the Island of Molokai. We had our lunch on the

summit and then headed back down the Summit Trail to the Observatory Trail, then back to our waiting vehicle by 4:30 PM.

While on the mountain we never encountered another soul, nor another living thing while hiking for that matter; no plant, insect, bird or animal. It was akin to walking on the surface of Mars, save for a breathable atmosphere and warmer temperature. In the summit log available in the Mauna Loa Cabin someone had written the following description of this massive volcano; "wretched and awesome." They couldn't have stated our impression more accurately. It is an amazing place.



Our Route